Discovery Education.com Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Earth’s Waters- Water Quality- Explore **tab Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Find the definitions for the Indicators of Water Quality using the article, video, or searching the web.

**Bio-Indicator**

Temperature

Turbidity

Dissolved oxygen

Salinity

Nitrates  
**pH**   
**pH scale**   
**Indicator**  
**Water quality**   
**Aquifer**   
**Non-point source pollution**   
**Point Source pollution**

**Pollutant**   
**Stewardship**

**Wastewater**   
**Coagulation**

**Sedimentation**

**Filtration**   
**Disinfection**

**Storage**   
**water treatment process**   
**watershed**  
**River Basin**   
**concentration**

**Watch the Video -Water, Pollution, and Waste**

**As you watch the video, roll your mouse over the screen for the pop up which have additional information to answer the questions.**

**Don't Drink the Ocean!**

* Majority of water on Earth is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Name 3 ways we use fresh water:
* You can't drink seawater because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* If you did drink seawater you could die from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How Water Freshens Up

* The water cycle is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that requires \_\_\_\_\_\_\_\_\_\_\_\_, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Water has a much \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ boiling point than \_\_\_\_\_\_\_\_\_\_\_\_, the salt stays behind, making the oceans ever \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ water vapor is carried over the continents by winds.
* The moisture \_\_\_\_\_\_\_\_\_\_\_\_\_ into \_\_\_\_\_\_\_\_\_\_\_\_ and then \_\_\_\_\_\_\_\_\_\_\_ onto the land and either remains as \_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, melts and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into the ground, or \_\_\_\_\_\_\_\_\_\_ into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, ultimately returning to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Water We Can Use

* Freshwater accounts for only \_\_\_\_\_\_\_\_% of our water supply
* \_\_\_\_\_\_\_\_\_\_\_\_\_ is locked up and unavailable in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or exists as inaccessible or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_groundwater.
* The amount of available \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ is comparatively tiny; only about \_\_\_\_\_\_\_ of the world's water.

Water We Need

* You can live about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ without \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, but only \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ without water.
* Humans evolved to live near \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ and lack the ability to \_\_\_\_\_\_\_\_\_\_\_\_ for extended periods with little or no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Water Hogs

* The US uses approximately \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ liters of fresh water everyday
* The average person uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of water daily
* What percentage comes from lakes and rivers? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Where does the rest of the fresh water come from? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* 50% of water is devoted to:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Only \_\_\_\_\_\_\_\_\_\_\_\_\_ goes into our homes
* Average daily per-person water use is about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ per person, per day

How We Treat Water

* Most of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the US passes through a \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ plant before it is returned to \_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_ or piped to the \_\_\_\_\_\_\_\_\_\_.
* Most treatment facilities combine \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sewage treatment.
* Primary treatment allows much of the suspended \_\_\_\_\_\_\_\_\_\_\_\_\_material to settle.
* The \_\_\_\_\_\_\_\_\_\_\_\_ is then sent to \_\_\_\_\_\_\_\_\_\_\_\_\_\_, used as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or treated further.
* \_\_\_\_\_\_\_\_\_\_\_\_ that has received \_\_\_\_\_\_\_\_\_\_\_\_\_\_ treatment usually goes on to receive \_\_\_\_\_\_\_\_\_\_\_\_\_\_ treatment, which often combines \_\_\_\_\_\_\_\_\_\_\_\_\_ of the water with introduction of \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_.
* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_feed on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ material in the \_\_\_\_\_\_\_\_\_\_\_\_\_and break it down into less harmful compounds, many of which \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as \_\_\_\_\_\_\_\_\_\_\_ and can be removed before the water is discharged back into the environment.

Fertilizer Kills!

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_runoff can be a big problem in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* It contains \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and other chemicals, but it also contains \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and animal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that act as fertilizers.
* \_\_\_\_\_\_\_\_\_\_\_\_and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to grow out of control
* As these \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_choke off sunlight in the water in \_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_, or the \_\_\_\_\_\_\_\_\_\_\_\_\_, they also \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_ in huge quantities.
* Causing more \_\_\_\_\_\_\_\_\_\_ to grow, which uses up all of the \_\_\_\_\_\_\_\_\_\_\_\_ in the \_\_\_\_\_\_\_\_\_\_\_, causing \_\_\_\_\_\_\_\_\_ and other animals and \_\_\_\_\_\_\_\_\_\_\_\_ to die.
* This process, called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, can result in a permanent "\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_" where life once flourished.

Diarrhea Is No Joke!

* Diarrhea that is symptomatic of various diseases kills more infants and children \_\_\_\_\_\_\_\_\_\_\_\_\_\_ than any other cause, nearly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ each year.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_can be deadly because it can lead to severe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is a real problem in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_where fresh \_\_\_\_\_\_\_\_\_\_\_\_ water is \_\_\_\_\_\_\_\_\_\_\_.
* The drinking water itself is the source of the \_\_\_\_\_\_\_\_\_\_\_\_.
* Biggest causes of diarrhea is a group of infectious \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, but \_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_, and various other disease-causing organisms continue to kill people.
* Improved \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of drinking water can help improve survival

Waste Isn't Street-Wise

* What are the main way lakes and oceans become polluted? Name 3 things that cause this pollution.

Make Your Own Fuel!

* What is Biodiesel Fuel and why is it important?

Fish Don't Like It!

* Which type of rock is better at neutralizing acids in water? Where are the vast majority of these rocks found?
* What is acid rains role in damaging the aquatic ecosystem?

Space for our Trash?

* Read about one solution for relocating our waste. What is your opinion on this?

Is a Landfill Sanitary?

* What are some potential problems to landfills?

What You Can Do for Water

* What can you do??